

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/540,705	06/24/2005	Hubert Cecile François Martens	NL 021392	2407
24737. 7590 01/12/2007 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001			EXAMINER	
			BATTAGLIA, MICHAEL V	
BRIARCLIFF MANOR, NY 10510			ART UNIT	PAPER NUMBER
			2627	
SHORTENED STATUTOR	RY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MC	ONTHS	01/12/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)				
	10/540,705	MARTENS ET AL.				
Office Action Summary	Examiner	Art Unit				
	Michael V. Battaglia	2627				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 24 June 2005.						
2a) This action is <b>FINAL</b> . 2b) ⊠ This	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
3) ☐ Since this application is in condition for alloward	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) <u>1-11</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-3 and 5-11</u> is/are rejected.						
7)⊠ Claim(s) <u>4</u> is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>24 June 2005</u> is/are: a) accepted or b)⊠ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a)⊠ All b)□ Some * c)□ None of:						
1.⊠ Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
•						
Attachment(s)						
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> </ol>	4)					
Notice of Draftsperson's Patent Drawing Review (P10-948)     Information Disclosure Statement(s) (PTO/SB/08)	5) 🔲 Notice of Informal F					
Paper No(s)/Mail Date	6)  Other:					

## Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

## **Drawings**

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "adjustable optical element" of claim 6 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. Additionally, the drawings are objected to because the unlabeled rectangular boxes of Fig. 2 should be provided with descriptive text labels.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Application/Control Number: 10/540,705 Page 3

Art Unit: 2627

## Claim Objections

3. Claims 1-6 and 9-11 are objected to because of the following informalities:

- a.) In regard to claims 1, 9 and 11, rewriting the claims to remove the dashes is suggested.
- b.) On line 2 of claims 2-4, replacing "are adapted" with --is adapted-- is suggested.
- c.) On line 2 of claim 5, replacing "are arranged" with --is arranged-- is suggested.

  Appropriate correction is required.

### Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 5, 6, 9 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohira et al (hereafter Ohira) (US 5,751,690).

In regard to claim 1, Ohira discloses a device (Fig. 5) for recording information by writing marks (Figs. 2B and 4, element 5) in a track on a record carrier (Fig. 2A, element 1 and Fig. 5, element 23) via a beam of radiation, the device comprising a head (Fig. 5, element 21) for providing the beam, radiation control means (Fig. 5, elements 10, 12 and 16a) for controlling the beam to write the marks in a selected part of the track, the marks having a main mark intensity (Fig. 6C) and a mark length within a predefined range of mark lengths (Col. 3, lines 19-33), and

Art Unit: 2627

secondary radiation control means (Fig. 5, elements 13 and 16b) for controlling the beam to write secondary marks (Figs. 2-4, element 6) in the same selected part of the track (Figs. 2B and 4), the secondary marks having a secondary mark intensity that is substantially different from the main mark intensity (Fig. 6D and Col. 5, lines 28-36) and a length substantially longer than mark lengths in the predefined range (Figs. 2B and 4; Col. 2, lines 58-60; and Col. 3, lines 30-32).

In regard to claim 2, Ohira discloses that the secondary radiation control means is adapted for controlling the beam to write only secondary marks in the selected part of the track (note that elements 13 and 16b of Fig. 5 are adapted for controlling the beam to write only secondary marks and take no part in writing the marks).

In regard to claim 5, Ohira discloses that the secondary radiation control means is arranged for writing the secondary marks by controlling a writing power of the radiation of the beam to secondary level that is substantially lower than a writing power for writing the marks (Figs. 6B and 6D and Col. 5, lines 28-36).

In regard to claim 6, Ohira discloses that the secondary radiation control means is arranged for writing the secondary marks by controlling the shape of the beam, in particular by an adjustable optical element (Fig. 5, elements 13 and 16b).

In regard to claim 9, Ohira discloses a method of recording information by writing marks (Figs. 2B and 4, element 5) in a track on a record carrier (Fig. 2A, element 1 and Fig. 5, element 23) via a beam of radiation ("light beam" of Col. 4, line 46), the method comprising the steps of controlling the beam to write the marks in a selected part of the track (Figs. 6A and 6C), the marks having a main mark intensity (Fig. 6C) and mark lengths within a predefined range of mark lengths (Col. 3, lines 19-33), and controlling the beam to write secondary marks (Figs. 2-4,

Art Unit: 2627

element 6) in the same selected part of the track (Figs. 2B and 4), the secondary marks having a secondary mark intensity that is substantially different from the main mark intensity (Fig. 6D and Col. 5, lines 28-36) and a length substantially longer than mark lengths in the predefined range (Figs. 2B and 4; Col. 2, lines 58-60; and Col. 3, lines 30-32).

In regard to claim 10, Ohira discloses that said controlling writing the marks is performed at a first instance in time and writing the secondary marks is performed at a different instance in time during two separate scans of the selected part of the track (Col. 6, lines 13-22 and note that simultaneous controlling writing the marks and secondary marks during one scan of the selected part of the track anticipates controlling writing the marks is performed at a first instance in time and writing the secondary marks is performed at a different instance in time during two separate scans of the selected part of the track because simultaneous controlling is an improvement therefrom (i.e. separate control is the building blocks from which simultaneous control is achieved)).

5. Claims 1, 3 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Kobayashi et al (hereafter Kobayashi) (US 6,963,529).

In regard to claim 1, Kobayashi discloses a device (Fig. 2) for recording information by writing marks (Fig. 4, elements P1 and P2 and "pit row in accordance with the audio data SA" of Col. 4, lines 6-11) in a track on a record carrier (Fig. 2, element 2 and Fig. 4, element 40) via a beam of radiation, the device comprising a head (Fig. 2, elements 6, 8 and 9) for providing the beam, radiation control means (Fig. 2, elements 11 and 13) for controlling the beam to write the marks in a selected part of the track, the marks having a main mark intensity ("ON" intensity where the mark is not locally narrowed (Col. 3, lines 57-63 and Col. 17, line 64-Col. 18, line 7))

Art Unit: 2627

and a mark length within a predefined range of mark lengths (Col. 13, lines 11-23), and secondary radiation control means (Fig. 2, elements 7 and 14) for controlling the beam to write secondary marks (Fig. 4, locally narrow portions of pits P1) in the same selected part of the track (Fig. 4 and Col. 6, lines 4-15), the secondary marks having a secondary mark intensity that is substantially different from the main mark intensity (Fig. 4 and Col. 17, line 64-Col. 18, line 7) and a length substantially longer than mark lengths in the predefined range (Col. 13, lines 37-43).

In regard to claim 3, Kobayashi discloses that the secondary radiation control means is adapted for controlling the beam to write a combination of the marks and the secondary marks during said recording of information (Fig. 4).

In regard to claim 11, Kobayashi discloses a device (Fig. 5) for reading information (Fig. 5, element SA) represented by marks (Fig. 4, elements P1 and P2) and additional information (Fig. 5, element SB) represented by secondary marks (Fig. 4, locally narrow portions of pits P1) from a track on a record carrier (Figs. 4 and 5, element 40) via a beam of radiation ("laser beam" of Col. 9, line 34), the marks having a main mark intensity ("ON" intensity where the mark is not locally narrowed (Col. 3, lines 57-63 and Col. 17, line 64-Col. 18, line 7)) and mark lengths within a predefined range of mark lengths (Col. 13, lines 11-23), the secondary marks having a secondary mark intensity that is substantially different from the main mark intensity (Fig. 4 and Col. 17, line 64-Col. 18, line 7) and a length outside the predefined range of mark lengths (Col. 13, lines 37-43), and the marks and the secondary marks being in the same selected part of the track (Fig. 4), the device comprising a head (Fig. 5, element H) for providing the beam, a frontend unit (Fig. 5, elements 43 and 45) for generating a scanning signal (Fig. 5, element BD) for detecting marks and secondary marks during said scanning, and a read processing unit (Fig. 5,

Art Unit: 2627

elements 47 and 48) for retrieving the information from the scanning signal, and a secondary read unit (Fig. 5, element 50) for retrieving additional information encoded in the secondary marks from the scanning signal.

6. Claims 7 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Schiewe (US 5,608,718).

In regard to claim 7, Schiewe discloses a record carrier (Fig. 1) carrying information represented by marks (Fig. 2, elements 21) in a track (Fig. 2, elements 1-10), the marks in at least a part of the track having a main mark intensity ("value of intensity generating pits" of Col. 4, lines 49-53) and a mark length within a predefined range of mark lengths (Fig. 2; Col. 4, lines 1-10; and Col. 1, lines 16-20 and note that "Standard IEC 908" specifies eight-to-fourteen bit modulation (see citation of pertinent prior art below)), and the same part of the track further comprising secondary marks (Fig. 2, element 23) having a secondary mark intensity that is substantially different from the main mark intensity (Col. 3, lines 33-48 and Col. 4, lines 49-53), and the secondary marks having a length substantially longer than mark lengths in the predefined range (Figs. 1 and 2 and Col. 2, line 58-Col. 3, line 8).

In regard to claim 8, Schiewe discloses that said different secondary mark intensity is constituted by the secondary marks being effectively narrower than the marks (Fig. 2 and Col. 4, lines 15-18).

## Allowable Subject Matter

7. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. None of the references of record alone or in combination suggest or

Art Unit: 2627.

fairly teach a device including all of the limitations of claims 1 and 3 and wherein the secondary radiation control means are adapted for controlling the beam to create the combination of the marks in which marks located at an area of track having a secondary mark, have a main mark intensity different from the main mark intensity of marks located at an area of the track not having a secondary mark, in particular the difference being such that in a scanning signal a level difference between marks and intermediate spaces is substantially equal at both areas of the track.

#### Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sinquin et al (US 6,425,089) disclose that IEC 908 standard specifies eight-to-fourteen bit modulation (Col. 1, lines 48-53). Fujiki (US 6,061,319) (Fig. 2), Yamamoto et al (US 6,078,552) (Fig. 5), and Inazawa et al (Fig. 11) disclose record carriers carrying information represented by modulated marks having a main mark intensity and secondary marks having a secondary mark intensity and a length longer than the length of the modulated marks.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael V. Battaglia whose telephone number is (571) 272-7568. The examiner can normally be reached on M-F, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, A. Wellington can be reached on (571) 272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/540,705 Page 9

Art Unit: 2627

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael Battaglia

TAN DINH PRIMARY EXAMINER

1108/07